UNITED STATES PATENT AND TRADEMARK OFFICE

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09/509,049	03/21/2000	JURGEN BRIESKORN	P00.0134	5412

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EXAMINER
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ART UNIT	PAPER NUMBER
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DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _01 June 2004_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-16_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-16_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments with respect to claims 1-16 have been considered but are moot in

view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3.   Claims 1, 6, 8, 9, 12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Thompson (USPN 6,091,803) in view of Jackson et al (USPN 5,287,352) in

further view of Solomon (USPN 5,974,043).

4.   Regarding claims 1 and 14, Thompson discloses a method and system for transmitting

data in a communication system having the elements of a telecommunication terminal apparatus

(ref. 7), a computer device (ref. 15), and a switch (ref. 9), wherein said elements are connectable

to a public telephone network (ref. 11) (col. 2, lines 18-43 and col. 3, lines 23-63), comprising

the steps of and means for: connecting said computer device to said telecommunication terminal

apparatus via a first bus system (ref. 17 and col. 3, lines 23-63); a system, within the

telecommunication apparatus for relaying signals incoming from the switch to the first bus

system and vice versa (col. 3, lines 23-63 and col. 4, line 57-col. 5, line 3); connecting said

telecommunication terminal apparatus to said switch via an interface (col. 3, lines 23-63 and col.

4, lines 8-29); receiving reception data by said telecommunication terminal apparatus from said

switch (col. 3, lines 23-63 and col. 4, line 44-col. 5, line 20); transmitting the reception data by

said telecommunication terminal apparatus operating in a first operating mode to said first bus

system, and forwarding the reception data via said first bus system to said computer device (col.

3, lines 23-63 and col. 4, line 44-col. 5, line 20); processing, by a processor of said computer

device, the reception data received by said computer device from said telecommunication

terminal apparatus (col. 5, lines 12-20) where it is implicit that the determination of whether to

forward or act on the data requires processing; forwarding, by said computer device, to said

telecommunication terminal apparatus, processed reception data via said first bus system (col. 3,

lines 23-63 and col. 4, line 44-col. 5, line 20, esp. col. 5, lines 12-20); outputting the processed

reception data by said telecommunication terminal apparatus (col. 2, lines 24-32 and col. 6, lines

6-9); producing transmission data by said telecommunication terminal apparatus (col. 2, lines 24-

32; col. 3, lines 23-63; and col. 4, line 44-col. 5, line 20) where it is implicit that the phone

produces transmission data; forwarding the transmission data by said telecommunication

terminal apparatus operating in the first operating mode to said computer device via said first bus

system (col. 2, lines 24-32; col. 3, lines 23-63; and col. 4, line 44-col. 5, line 20); processing, by

said processor of said computer device, the transmission data received by said computer device

(col. 2, lines 24-32; col. 3, lines 23-63; and col. 4, line 44-col. 5, line 20, esp. col. 5, lines 12-20)

where it is implicit that the determination of whether to forward or act on the data requires

processing; and transmitting, by said computer device, to said telecommunication terminal

apparatus, processed transmission data via said first bus system (col. 2, lines 24-32; col. 3, lines

23-63; col. 4, line 44-col. 5, line 20; and col. 6, lines 6-9); and transmitting, by said

telecommunication terminal apparatus to said interface for forwarding to said switch (col. 2,

lines 24-32; col. 3, lines 23-63; and col. 4, line 44-col. 5, line 20). Thompson does not expressly

disclose that a second bus system, which has a smaller bandwidth than said first bus system,

connects individual internal assemblies of said telecommunication terminal apparatus. Jackson

discloses, in system using a digital telephone, that it is well known in the art to have an internal

bus in order to distribute information arriving at the telephone to the telephone's various

components (col. 1, lines 41-52). It would have been obvious to one of ordinary skill in the art at

the time of the invention to have a second bus system that is utilized for the connection of

individual internal assemblies of said telecommunication terminal apparatus in order to distribute

information arriving at the telephone to the telephone's various components. Thompson further

discloses that the first bus system is a USB system, where Examiner takes official notice that

USB systems are capable of transmitting up to 12 Mbps. Jackson discloses that the second bus

system is a GCI bus, where Examiner takes official notice that GCI systems are capable of

transmitting of up to 8.192 Mbps. Therefore the second bus system has a smaller bandwidth than

the first bus system. Thompson in view of Jackson does not expressly disclose processing, by

said processor of said computer device, the transmission data received by said computer device

to change the transmission data into processed transmission data since Thompson in view of

Jackson does not expressly disclose that the data is changed by the processing (mere forwarding

does not necessitate a change in the data). Solomon teaches, in a system comprising a telephone

connected to a computer, encrypting the information "by the computer which is connected to the

telephone, prior to being communicated through the PSTN" and decrypting the information "by

the computer which is connected to the telephone, after being received from the PSTN" (col. 3,

lines 31-38) where it is implicit that this is done to provide more secure communications. It

would have been obvious to one of ordinary skill in the art at the time of the inventions to process (encrypt), by said processor of said computer device, the transmission data received by said computer device to change the transmission data (data sent from telephone to computer) into processed transmission data (encrypted data) in order to provide more secure communications.

5.   Regarding claim 6, referring to claim 1, Thompson in view of Jackson in further view of Solomon discloses that the switch is a private branch exchange (PABX) (Thompson: col. 4, lines 25-29).

6.   Regarding claim 8, referring to claim 6, Thompson in view of Jackson in further view of Solomon discloses that the telecommunication terminal apparatus has a second operating mode, in which it is controlled in a conventional manner by said private branch exchange, and which allows operation independent of said computer device (Thompson: col. 2, lines 23-43 and col. 3, lines 49-63).

7.   Regarding claim 9, referring to claim 1, Thompson in view of Jackson in further view of Solomon discloses that the telecommunication terminal apparatus is a telephone (Thompson: col. 2, lines 18-32).

8.   Regarding claim 12, referring to claim 1, Thompson in view of Jackson in further view of Solomon discloses that the switch corresponds to the ISDN standard (Thompson: col. 3, lines 23-32 and col. 5, line 56-col. 6, line 3).

9.   Regarding claim 15, referring to claim 14, Thompson in view of Jackson in further view of Solomon discloses sending the reception data received by said switch and the transmission data produced by said telecommunication terminal apparatus to said computer device via said telecommunication terminal apparatus (Thompson: col. 3, lines 23-63 and col. 4, line 44-col. 5,

line 20), wherein the reception and transmission data received by said computer device

represents spoken words (Thompson: col. 3, lines 29-31); intermediately storing the reception

and transmission data received by said computer device in a transmission data store of said

computer device, wherein said computer device further comprises a program that enables

simulation of a telephone answering device (Thompson: col. 5, lines 50-55), and wherein said

transmission data store enables repeated time-displace forwarding of the reception and

transmission data representing spoken words to said switch via said telecommunication terminal

apparatus (Thompson: col. 5, lines 50-55); and forwarding the reception and transmission data

received by said computer device, by said computer device, in a time-displaced fashion via said

telecommunication terminal apparatus (Thompson: col. 5, lines 50-55).

10.   Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (USPN

6,091,803) in view of Jackson et al (USPN 5,287,352) in further view of Solomon (USPN

5,974,043) as applied to claim 1 above, and further in view of Yeh et al (USPN 6,366,653).

11.   Regarding claim 2, referring to claim 1, Thompson in view of Jackson in further view of

Solomon does not expressly disclose that the processor encodes the transmission data produced

by said telecommunication terminal apparatus, and decodes the reception data received from said

switch. Yeh teaches, in a system for integrating a telephone to a computer, that the computer

(processor) encodes the incoming signals and decodes the outgoing signals in order to configure

the information in a format which is recognized by the computer (decode received data) and then

places the data back into a format recognized by the telephone network once processing is

complete (encode transmitted data) (col. 5, lines 9-24). It would have been obvious to one of

ordinary skill in the art at the time of the invention to have the processor encode the transmission

data produced by the telecommunication terminal apparatus and decode the reception data

received from the switch in order to configure the information in a format which is recognized by

the computer and then place the data back into a format recognized by the telephone network

once processing is complete.

12.   Claims 3, 5, 10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Thompson (USPN 6,091,803) in view of Jackson et al (USPN 5,287,352) in further view of

Solomon (USPN 5,974,043) as applied to claim 1 above, and further in view of Davis et al

(USPN 5,483,530).

13.   Regarding claim 3, referring to claim 1, Thompson in view of Jackson in further view of

Solomon discloses that the first bus system is implemented utilizing a USB bus (Thompson: col.

3, lines 23-38); and all data of second bus are transmitted via said first bus system (Thompson:

col. 4, line 60-col. 5, line 63). Thompson in view of Jackson in further view of Solomon does not

expressly disclose that the second bus system is implemented utilizing an IOM-2 multiplexer.

Davis discloses, in a system for communicating with digital and analog devices over a single

digital interface, that IOM-2 is a time division multiplex interface which multiplexes the B

channel and D channel and control information into a single serial interface (col. 12, lines 1-9). It

would have been obvious to one of ordinary skill in the art at the time of the invention to have

the second bus be implemented utilizing an IOM-2 multiplexer since an IOM-2 multiplexer

multiplexes the B channel and D channel and control information into a single serial interface.

14.   Regarding claim 5, referring to claim 3, Thompson in view of Jackson in further view of

Solomon in further view of Davis discloses that the IOM-2 multiplexer comprises: B channels,

that the telecommunication terminal apparatus reroutes the reception and transmission data only

between said interface and the B channels (Thompson: col. 4, line 60-col. 5, line 63 and Davis:

col. 12, lines 1-9).

15.   Regarding claim 10, referring to claim 3, Thompson in view of Jackson in further view of

Solomon in further view of Davis discloses that the computer device has a program that enables

simulation of a telephone answering device (Thompson: col. 5, lines 50-55); said transmission

data represent spoken text (Thompson: col. 3, lines 29-31); said computer device further

comprises a transmission data store (computer disk drive or DSP) which enables repeated

time-displaced forwarding of said spoken text to said switch via said telecommunication terminal

apparatus (Thompson: col. 5, lines 50-55); said reception data which represent messages from

callers that are sent by said switch to said computer device via said telecommunication terminal

apparatus, that are intermediately stored in said computer device, and that are forwarded in a

time-displaced fashion via said telecommunication terminal apparatus, as reception data

(Thompson: col. 5, lines 50-55).

16.   Regarding claim 13, referring to claim 3, Thompson in view of Jackson in further view of

Solomon in further view of Davis discloses that items of control information comprise items of

information produced during a pressing of particular keys of said telecommunication terminal

apparatus (Thompson: col. 4, lines 30-56; esp. col. 4, lines 54-56).

17.   Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson

(USPN 6,091,803) in view of Jackson et al (USPN 5,287,352) in further view of Solomon

(USPN 5,974,043) in further view of Davis et al (USPN 5,483,530) as applied to claim 3 above,

and further in view of Hofer ("The IOM2 Serial Bus Interface for the Interconnection of ISDN

ICs", Electronic Engineering, June (1990) Vol. 62, No. 762, pages 69, 70, 72, 74, and 76).

18.   Regarding claim 4, referring to claim 3, Thompson in view of Jackson in further view of

Solomon in further view of Davis suggests that the IOM-2 multiplexer comprises: a CTRL

channel (bus 17B and control information) via which said computer device controls said

telecommunication terminal apparatus in said first operating mode (Thompson: col. 3, lines 29-

45; col. 4, line 60-col. 5, line 63 and Davis: col. 12, lines 1-9); a D* channel (D channel), via

which said computer device receives items of control information from said the

telecommunication terminal apparatus (Thompson: col. 4, line 60-col. 5, line 63, esp. col. 5, lines

12-20 and Davis: col. 12, lines 1-9) where a D channel is broadly equivalent to a D* channel;

and B channels via which said computer device and said telecommunication terminal apparatus

exchange data (Thompson: col. 4, line 60-col. 5, line 63 and Davis: col. 12, lines 1-9). Thompson

in view of Jackson in further view of Solomon in further view of Davis does not expressly

disclose having the IOM-2 multiplexer multiplex IC channels. Hofer discloses that the IOM-2

multiplexer can be used to interconnect ISDN ICs in order to permit the interconnection of ICs

within the system where ICs are used to transfer data within a terminal (pg. 70, col. 1, section

titled "Terminal Structure"). It would have been obvious to one of ordinary skill in the art at the

time of the invention to have the IOM-2 multiplexer multiplex IC channels in order to permit

data transfers within system.

19.   Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (USPN

6,091,803) in view of Jackson et al (USPN 5,287,352) in further view of Solomon (USPN

5,974,043) as applied to claim 6 above, and further in view of Mueller (USPN 5,453,984).

20.   Regarding claim 7, referring to claim 6, Thompson in view of Jackson in further view of

Solomon discloses that the interface is a U interface (Thompson: col. 6, lines 15-19 and lines 61-

64). Thompson in view of Jackson in further view of Solomon does not expressly disclose that

the U interface is an $U_{p0/E}$ interface. Mueller discloses that U-interfaces are manufacturer

specific, which are adapted to the particular type of equipment in use in the communication

system (col. 2, lines 62-67). It would have been obvious to one of ordinary skill in the art at the

time of the invention to use a particular type of U-interface according to the equipment used in

the communication system.

21.   Claims 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Thompson (USPN 6,091,803) in view of Jackson et al (USPN 5,287,352) in further view of

Solomon (USPN 5,974,043) as applied to claims 1 and 14 above, and further in view of Riemann

et al (USPN 5,892,764).

22.   Regarding claims 11 and 16, referring to claims 1 and 14, Thompson in view of Jackson

in further view of Solomon discloses that the system can be used for a variety of functions that

can be implemented in the computer (col. 5, line 63-col. 6, line 3). Thompson in view of Jackson

in further view of Solomon does not expressly disclose obtaining the reception data by said

computer device from said switch via said telecommunication terminal apparatus, wherein said

computer device further comprises a video conferencing mechanism; dividing, by said computer

device, the reception data into received image data and received speech data; displaying, by said

computer device, the received image data on a display screen of said computer device; sending,

by said computer device, the received speech data back to said telecommunication terminal

apparatus; transmitting the input speech data originating from a microphone of said

telecommunication terminal apparatus to said computer device via said first bus system;

assembling, by said computer device, transmission data from the input speech data and the input

image data; and transmitting said transmission data to said switch via said telecommunication

terminal apparatus. Riemann teaches, in an integrated telephone and computer system, where

each computer processes telephony data from its attached telephone (col. 2, lines 52-65), having

conferencing available where the computer receives various media streams over its connection

with the switch (col. 2, lines 52-65; col. 4, line 65-col. 5, line 5; col. 5, lines 18-28; and col. 6,

lines 27-39). It is implicit that for conferencing, each local computer will combine the telephony

data with related data to form a single data stream which is sent to the switch. Examiner also

takes official notice that video conferencing is very well known in the art. It would have been

obvious to one of ordinary skill in the art at the time of the invention to implement video

conferencing in a system where a computer and telephone are interfaced in order to allow the

system's users access to video conferencing. Thus, Thompson in view of Jackson in further view

of Solomon in further view of Riemann discloses obtaining the reception data by said computer

device from said switch via said telecommunication terminal apparatus (Thompson: col. 3, lines

23-63 and col. 4, line 44-col. 5, line 20), wherein said computer device further comprises a video

conferencing mechanism (Riemann: col. 2, lines 52-65; col. 4, line 65-col. 5, line 5; col. 5, lines

18-28; and col. 6, lines 27-39); dividing, by said computer device, the reception data into

received image data and received speech data (Thompson: col. 3, lines 23-63 and col. 4, line 44-

col. 5, line 20 and Riemann: col. 2, lines 52-65; col. 4, line 65-col. 5, line 5; col. 5, lines 18-28;

and col. 6, lines 27-39); displaying, by said computer device, the received image data on a

display screen of said computer device (Riemann: col. 2, lines 52-65; col. 4, line 65-col. 5, line

5; col. 5, lines 18-28; and col. 6, lines 27-39) where Examiner takes official notice that

displaying data on a computer during a video conference is well known; sending, by said

computer device, the received speech data back to said telecommunication terminal apparatus

(Thompson: col. 3, lines 23-63 and col. 4, line 44-col. 5, line 20 and Riemann: col. 2, lines 52-

65; col. 4, line 65-col. 5, line 5; col. 5, lines 18-28; and col. 6, lines 27-39); transmitting the input

speech data originating from a microphone of said telecommunication terminal apparatus to said

computer device via said first bus system (Thompson: col. 3, lines 23-63 and col. 4, line 44-col.

5, line 20 and Riemann: col. 2, lines 52-65; col. 4, line 65-col. 5, line 5; col. 5, lines 18-28; and

col. 6, lines 27-39); assembling, by said computer device, transmission data from the input

speech data and the input image data; and transmitting said transmission data to said switch via

said telecommunication terminal apparatus (Riemann: col. 2, lines 52-65; col. 4, line 65-col. 5,

line 5; col. 5, lines 18-28; and col. 6, lines 27-39).

Conclusion

23.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Peres et al (USPN 5,867,496) see col. 3, lines 58-66 which pertains to a GCI

interface. Ahuja et al (USPN 5,689,553) see Fig. 6 and col. 10, line 34-col. 11, line 40 which

discloses video conferencing.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Daniel J. Ryman whose telephone number is (703)305-6970. The

examiner can normally be reached on Mon.-Fri. 7:00-5:00 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Huy Vu can be reached on (703)308-6602. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

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                                              Daniel J. Ryman
                                              Examiner
                                              Art Unit 2665

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